AMSAT SATELLITE REPORT

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Special Report: Orlando, 13 - 15 March

In one of the most successful convention weekends in anyone's recollection, AMSAT made very substantial showings on several fronts at the ARRL National Convention held here. This report will cover several of the more significant features of AMSAT's presence at the convention.

Beginning on Friday afternoon, officials W3IWI and K9LF met with the ARRL Foundation to discuss cooperative fund raising plans aimed at supporting the Amateur Space Program. As a result, the Foundation announced an additional $10,000 in matching funds would be earmarked for the program. In addition K9LF was elected Vice President of the Foundation. AMSAT officers later met with ARRL Directors in a productive and cordial exchange of views on cooperative ventures for fostering interest in Amateur Satellites. On Saturday, AMSAT President, W3IWI and Vice Presidents WA2LQQ and K9LF met with ARRL President W2HD, General Manager W1RU and Amateur Satellite Service Council Chairman W6EJJ to review plans for moving into the Phase III era. AMSAT officials were also pleased to meet with senior officials of ARRL, RSGB, as well as numerous manufacturers' representatives present at the convention. The factory reps were genuinely interested in learning directly from AMSAT the status and plans for the future of Amateur Satellites in order to plan their equipment development budgets.

Meanwhile, the AMSAT user-oriented activities were humming along in superb orchestration under the able leadership of W4MID, WD4FAB, WB4ZXS and a very talented crew. For example, Nick, WØCA, seemed omnipresent with his assortment of cameras documenting the proceedings. The Saturday morning Satellite Forum was extremely well done by all speakers and well attended for the three-hour program. The entire program was videotaped by WD4HAL for possible packaging and distribution to clubs. Presenters included W3IWI, AA2Z, WA4NFY, WB4ZXS, WA4GJQ, and WØCA. The forum was hosted by W4MID. On Sunday morning a first-rate Mode J live demonstration was accomplished just outside the convention center with WD4FAB and WA4NFY pulling the switches and twiddling the knobs for 13 really super QSOs. WD4FAB advises that all 13 lucky stations who caught the convention demo station will be rewarded super-deluxe QSL cards. Doing yeoman at the impressive AMSAT booth, in addition to those mentioned above, were W4AT, WA4GJQ, WD4DTC and Southern Florida Area Coordinator W4DWN. It would be difficult to imagine a more productive, enjoyable weekend activity than was experienced by those with whom this reporter spoke. *ASR* congratulates the organizers.—*WA2LQQ*

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Snapshots of some Orlando activity.

OSCAR Orbital Predictions

The Project OSCAR Calendars for April, May and June were mailed 20 March. Project OSCAR President W6XN reminds those sending in S.A.S.E.s that the Postal rate increase is effective 22 March and raises the rate for one unit of First Class from fifteen to eighteen cents. Be sure to have the proper postage on your S.A.S.E. Those who already have envelopes on file for the second quarter calendar will still receive the calendar even though their envelopes are three cents short on postage. Project OSCAR will make up the difference now to avoid delaying receipt but W6XN asks those owing to please include an extra stamp in your next request to make up the difference. Write to Project OSCAR, P.O. Box 1136, Los Altos, CA 94022.

King Family Portend

AMSAT's VP-Engineering W3GEY, Jan King and his lovely wife Donna became the parents of a baby girl, Nadia Marie Sunday, 8 March. Nadia Marie weighed 7 lb. 7 oz. at birth. Both mother and daughter are doing well. The two men of the family, Jan and son Ian, welcomed home the ladies Tuesday.

Other AMSAT officials made some astute observations regarding the arrival of Nadia Marie. W3IWI advises that the blessed event occurred 9 months and 5 days after Jan's return from Kourou prior to the lanuch of Phase IIIA. Hmmmm! Maybe it was something in the French Guianese water. G3ZCZ notes that daughters of AMSAT officials are good omens. Joe's daughter was born prior to AO8 launch and Perry Klein's (W3PK) daughter was born prior to AO7 launch. Since all were notable successes (daughters and satellites) Joe believes Nadia Marie's birth portends good. (Joe, G3ZCZ, is Editor of *ORBIT* and holds the rank of soothmumbler, one grade inferior to soothsayer!)

Phase III Appointment

AMSAT President W3IWI has announced the appointment of Dr. John DuBois, W1HDX, as Phase III Command Station Coordinator. In this capacity John will coordinate the activities of the Phase III command team which includes VE1SAT, W3GEY, WØLER, WØPN, W6PAJ, ZL1AOX, ZL1WN, DJ4ZC, W3ZM (at Goddard), and W3IWI. The coordination function bridges the two major organizational domains of operations and engineering. In the pre-launch, trans-launch and early post-launch era, the coordinator works mainly with engineering as command station software and hardware is debugged. When Phase IIIB is released for use, the Phase III command coordinator's major interface is with operations.

John plays a major role in the Phase III hardware development program and has in fact produced many of the PCBs to be used by the command team. You may have read the initial installment of a series of articles on the Phase III IFDEM which appeared in *ORBIT* No. 5 (January/February 1981). Congratulations to W1HDX from *ASR* and AMSAT.

Shuttle Launch Now April

In what must seem to NASA officials an interminable series of delays, the schedule for launch of the space shuttle Columbia was slipped to early April 81. Many amateurs and especially space-oriented AMSAT individuals are watching with anticipation hoping, no doubt, to snare a few minutes worth of a transmission directly from Columbia. The best chance for receiving rf transmissions from Columbia likely is on the vhf frequencies of 259.6 and 296.5 MHz which are used as back-up a-m voice channels to the main S-band channels at 2.250 and 2.225 GHz. Chances of catching anything at 259.6 or 296.5 MHz are slim because it is not a primary channel.

Project OSCAR Forges Future

The latest in a series of Project OSCAR meetings took place in El Segundo, California the afternoon of 7 March. Hosted by Col. John Browning, W6SP, AMSAT Board Chairman, the meeting featured briefings by Project OSCAR President W6XN; rf group leader WB6JNN; rf designer N6TX; digital group leader KL7GRF; and AMSAT's WA2LQQ.

The Project OSCAR collaboration with AMSAT Canada, led by VE2VQ, aims to have a geosynchronous amateur payload parked over the western hemisphere circa 1984. The 7 Mar. meeting was held to brief Project OSCAR members on program status and to encourage "bystanders" to pitch in. A technical session was held after the main meeting.

A featured attraction of the main meeting was the screening of two films on the European Space Agency's (ESA) activities. The first film presented a detailed view of Ariane launches and some of its planned future derivatives. The second film gave a thorough examination of the Kourou launch facility in French Guiana, South America. The films were provided by Mr. Bob Shutak of the Grumman Aerospace Corporation. Grumman is Arianespace's Launch Services Agent in the U.S. Arianespace is a consortium of European Aerospace concerns which will take over the *business* of launching spacecraft after ESA declares Ariane operational. The films were very well received by the 80 persons attending.

ORBIT Staff Expands

ORBIT Magazine Editor G3ZCZ/W3 has announced an expansion of the staff. N6TE and W4PID will join *ORBIT* as staff editors beginning with the next (March/April) issue. Both are experienced writers with N6TE having edited a medical journal and W4PID being a highly proficient technical writer. G3ZCZ/W3 is also seeking to fill additional slots in the area of drafting and technical editing. If you are interested, please contact Joe at AMSAT HQ, P.O. Box 27, Washington, DC 20044. As part of a general realignment of duties, W1XT, the *ASR* Managing Editor will assume similarly broad managerial responsibilities for *ORBIT*.

AMSAT Spotlight On: W4MID

As AMSAT's Area Coordinator for Northern Florida, Jim Tumilty, W4MID, plays a vital role in communicating news of the AMSAT Amateur Space Program to the general public and amateurs alike. It should not surprise that he does extraordinarily well in this role since, as a professional broadcaster in Orlando, Florida, Jim's *profession* is communicating. As "Jim Turner" of WDBO, W4MID's late afternoon radio show has garnered a large following in the commercial market. Similarly, Jim's polished manner and commanding stage presence make him a popular attraction at local club meetings and school presentations.

Jim's interest in amateur satellite activity blossomed relatively recently in his 20 years of hamming. Having done the usual catalog of dabbling, more or less seriously, with hf, DXing, SSTV, etc., Jim began to explore OSCAR satellite activities about three years ago. Since then he has enjoyed operating and developing a station that works well into AO7 and AO8. (See photo.) Jim sees the future of Amateur Radio closely paralleling his own interests in amateur satellites and, in particular, what he refers to as: "The obvious need to evolve upward in frequency and orbital altitude for bandspace and long-duration QSOs, respectively."

As far as AMSAT organizational activities are concerned, Jim's style is as positive as his attitude about himself (which is healthy and refreshing). In a manner typical of Jim's "grab it by the horns" style, he saw an abiding need to shore up some holes in AMSAT's image in northern Florida and moved firmly to fill the void by first illuminating the need and then by assuming the responsibility to make it right. Since assuming the Area Coordinator position, Jim's straightforward approach and contagious enthusiasm has acted to coalesce a diverse and highly motivated group in the Orlando environs. As an example of the positive results that derive some leadership of Jim's caliber, you should refer to the accompanying stories about the AMSAT presence at the ARRL National Convention. Jim's leadership in organizing the team and coordinating the interface with ARRL were self evident.

A further example unfolds weekly at 0800 EST Sundays when W4MID holds forth the SEASAT (South East Amateur Satellite) net on 7280 kHz. This informal net exemplifies Jim's concept of the ingredients needed to stimulate and maintain interest in the Amateur Space Program. He feels that AMSAT needs to fuel growth with strong leadership beginning at the local and regional levels. He suggests the SEASAT net confirms that hypothesis as a worthy example of how a regional net works in concert with strong, informed leadership to yield an enthusiastic satellite user community. Jim's family (wife Satsuku and Schnauzer Ooch) have a lot to be proud of, we're certain. With W4MID on the team, AMSAT has a lot to be proud of too! 73 to a FB OM de *ASR* es AMSAT.

Area Coordinator Survey

(A Special Report to ASR *by Field Editor Bob Nickels, KEØT)*

A telephone survey is being conducted by KEØT to ascertain the status of AMSAT's first level management: The Area Coordinators. The survey will be conducted by telephone in the U.S. and later by mail to selected overseas coordinators.

The objective of the survey is to evaluate each coordinator's level of present involvement and currency with the program and conversely to determine where alternates or replacements are warranted. The results of the survey will be published in either *ASR* or *ORBIT*. With about one-half of the listed U.S. Area Coordinators already contacted, the results are gratifying. Most Area Coordinators remain current, enthusiastic and dedicated. Moreover, most are still active in satellite activities. Some coordinator slots are now open, however, including: AL, AZ, DE, MD, NM, SC.

It is difficult to overstate the importance of the Area Coordinator team. As AMSAT's interface to the general public as well as the general Amateur Radio community, the area coordinators exert enormous leverage on the way AMSAT is perceived. Their ability to communicate well to the novitiate the nature of the organization and the need to actively support it are critical to AMSAT's long-term health.

If you are interested in becoming an Area Coordinator or assisting one, you are invited to contact K1HTV, Rich Zwirko at AMSAT HQ, P.O. Box 27, Washington, DC 20044.

New/Interesting DX

A few new stations keep popping up every week to offer some variety to those who are willing to hunt. This week's batch includes two good catches both on Mode B cw. They are UI8AX (145.930) and UM8MAD (145.935).

W4MID shown here at the controls.

ON THE HORIZON

A Calendar Of Future Events

April 1981

11-12: Phase III Command Mtg., GSFC
15: UoSAT: T = − 5 Months
18-19: Board of Directors Mtg., GSFC
24: Phase IIIB: T = − 12 Months
25-26: Dayton Hamvention

Help Wanted

Needed at AMSAT Lab for Phase III construction: 50 to 100 feet of RG-184 Teflon coax. Contact Gordon at (301) 344-7780.

Gofer needed for odd jobs at AMSAT Lab. Applicant must be in Greenbelt, Maryland area. Contact Jan at (301) 344-7780.

VP-Engineering W3GEY advises the lab at Goddard has an immediate, urgent need for a laboratory quality balance. Rough specs are: gross capacity: 1-2 kg; sensitivity: 0.1 g or less. An O'Haus model 1500 or equal should be satisfactory. If a loaner could be arranged for 18 months, that would be OK but we also need a balance on a continuing basis. Contact WA2LQQ at (201) 768-2500 or (914) 986-6904 to coordinate logistics.

Survey Winner Named

Roy Hill, W4PID is the lucky winner of the AMSAT Life Member Survey. Roy returned his questionnaire and his name was selected at random. As announced by AMSAT President W3IWI, Roy will receive the mint Collins 75S-3C that was donated to AMSAT. Tom, W3IWI, wishes to thank all those who participated in the Life Member Survey and, of course, an especially strong note of thanks to those 600+ individuals who donated nearly $30,000 to AMSAT. Well Done, Gentlemen!

Notes on Operations

AO7 continues performing well and the random mode switching is, though bothersome at times, not a major irritant. Mode C operations on UTC Tuesdays continue and some codestore load attempts will be made on UTC Wednesdays. Use AO7 in whatever mode it is found in.

AO8 is now exhibiting the expected cooling. Latest reports show a temperature of 37°C as average. The command stations will exercise their discretion in selecting dual Mode A/J as they have in the past. The expectation is, that based on favorable battery conditions, AO8 will be in A/J for a few more weeks. AO8 is now running about 90 seconds ahead of the time predicted by the Project OSCAR Calendar. Several other publications, including *ORBIT*, derive their predictions from the Project OSCAR Calendar, so you should apply that 90 second correction factor to all derivatives of the Project OSCAR Calendar.

Editorial

Smoked Ham.

In a precedent-setting finding, the New York State Worker's Compensation Board ruled, in a decision handed down February 26, that a radio technician died as a result of exposure to microwave radiation while in the employ of New York Telephone Company. The Board's decision, believed to be the first ruling to cite "microwave illness" as a cause of death, was seen as a landmark because it may open the path for dozens of similar cases now entering litigation where the claimant seeks damages for alleged injury attributable to occupational exposure to microwave radiation.

Samuel Yannon died on June 10, 1974 at the age of 63. He had been employed on the 87th floor of the Empire State Building in New York City where his job was to maintain microwave relay equipment used for the distribution of television signals. Beginning about 11 years after microwave exposure began, Yannon began to complain of visual and aural maladies. Later, he developed cataracts, loss of equilibrium and severe, premature senility. At the time of his death his formerly robust frame of 180 pounds had withered to a skeletal 67 pounds.

The potential implications of the Compensation Board's findings go well beyond the obvious legal and medical realms and bound precariously close to that domain of personal radio. (Amateur and CB.) The long-term exposure of the desceased to high-power microwaves and, by contrast, the occasional use of equipment using lower power and frequencies are distinctions we fear will be clouded in the media stampede to alert the public (again) to the poorly perceived threat. (Recall the fanfare accompanying the recent book, *The Zapping of America*.) The non-technical public is ill-disposed to evaluate threats in shades of gray. Simply put, the public says in effect, if it's bad, make it go away and if it's good, promote it. How then will the public come to view the avocational use of microwaves by Radio Amateurs? We have reason to hope that spokesman will come forth to present a balanced view of risk/reward *vis a vis,* Amateur Radio use of microwaves. He would point out that common sense should prevail. An Amateur who places his hammock at the focus of an L-band tropo-scatter dish would not be employing good common sense. Moreover, the present or future microwave user, should be aware that the radiation level to which Mr. Yannon was exposed was only 15 percent of the maximum allowed under present U.S. standards. And he should be aware that many European standards call for a maximum allowable power density of from one to ten percent of the U.S. standard. But is there a real threat to you or your neighbor's health if simple safety measures are observed? Though the jury is still out, it seems likely that unless you're the "smoked ham" in the hammock, you can expect more heat from the neighbors than from the dish.—*WA2LQQ*